









University-Business Cooperation (UBC) 2021-2027 Contributing to a Sustainable and Social Europe (beyond COVID-19)

Reflection Note (July 2020)

Prepared by:

François Staring and Michael Blakemore (Ecorys)
Tine Andersen and Kristine Nedergaard Larsen (DTI)
Nadine Burquel (BCS Consult) and Sigrid Mannsberger-Nidl (3S)

Reflection Paper (February 2020)

Prepared by:

François Staring and Michael Blakemore (Ecorys)
Tine Andersen and Kristine Nedergaard Larsen (DTI)



Contents

Re	eflection note: UBC in a post-COVID-19 context	1
1	Introduction	5
	1.1 Building competitive innovation ecosystems across Europe	5
	1.2 Towards sustainable collaboration in a world of technological and	
	social change	6
2	Lifelong Learning in a Digital World	9
	2.1 Introduction	
	2.2 Supporting lifelong learning for graduates and the workforce	
	2.3 Lifelong learning focused on digital skills	
3	Equality in All its Senses	13
	3.1 Introduction	
	3.2 Equity and inclusion in higher education	
	3.3 UBC for social innovation	
4	Building Sustainable and Resilient Innovation	
	Ecosystems	17
	4.1 Introduction	
	4.2 Entrepreneurial, socially responsible and resilient citizens	
	4.3 Sustainable and resilient innovation ecosystems	
5	Conclusion: From UBC to Societal Education and	
	Business Education	21

Reflection note: UBC in a post-COVID-19 context

The sections which follow this reflection note present a reflection paper which was written at the end of the previous UBC contract held by the Ecorys consortium with the European Commission. It was written at a time of transition from one Commission to another and sought to make concrete recommendations about EU support for University-Business Cooperation (UBC) for 2021 and beyond. It was written before Europe entered the dramatic series of lockdowns in response to the COVID-19 global pandemic.

1. Rethinking the format of UBC in a post-COVID-19 context

UBC prior to the pandemic was very much predicated on the physical mobility of participants in events (UB Forums in Brussels, and Thematic UB Forums across Member States) that took place in locations to which participants travelled. There was occasionally a webcast of plenary sessions, with some limited remote interaction via Twitter, but not much more. Yammer was also used to encourage and support ongoing interaction, collaboration and the exchange of good practices between university and business stakeholders.

The **new UBC Request for Services (RfS)** from the Commission came to us as the pandemic was at its height, and the Commission clearly saw the need both to plan for any resumption of physical events well in the future (at the earliest from 2021), and asked us to explore options for the immediate future via Webinars and remote events, where more participants can attend and interact – lockdown has shown clearly that in some contexts, through digital platforms (such as MS Teams, Skype for Business, etc.) a greater participation and reach can be obtained. We will be planning such remote events with the Commission and looking at designing hybrid formats for future UB Forums in Brussels and Thematic UB Forums in the Member States (i.e. combining physical location with a strong remote participation focus).

2. Rethinking the priorities for UBC in a post-COVID-19 context

The recommendations included in the February 2020 paper (i.e. following sections) draw on some key lessons from the policy messages and innovative examples of UBC from the UB Forums over recent years and try to ensure the themes proposed for future UBC are focused on new Commission President Ursula von der Leyen's political priorities. If we recap these recommendations, we can say that the Commission's three key priorities (i.e. the digital transition, green transition and achieving inclusion) are still very relevant for the post-COVID-19 context. If anything, the current pandemic has made these priorities even more important than ever. In the coming years, targeted investments in the twin green and digital transitions will be made under the 'Next Generation EU' programme in order to support Member States to draw lessons from the crisis and become more resilient. The UBC network plays a key role in strengthening the role of HEIs as territorial hubs for innovation and resilience, which are therefore a strategic asset to contribute to the successful implementation of the COVID-19 recovery plan at EU, national and regional level. In summary, the February 2020 paper included three sets of recommendations, centred around the Commission's three key priorities. It recommended UBC will be best focused on:

¹ Von der Leyen, U. (2019). *A Union that Strives for More. My Agenda for Europe*. Political Guidelines for the Next European Commission 2019-2024. Brussels: European Commission. Available at: https://ec.europa.eu/commission/sites/beta-political/files/political-guidelines-next-commission_en.pdf

² See https://ec.europa.eu/info/live-work-travel-eu/health/coronavirus-response/recovery-plan-europe/pillars-next-generation-eu_en

(1) Priority 1 (Digital transition): Helping to address society's need for lifelong learning in a digital world

The challenges, opportunities and societal changes imposed by automation and Artificial Intelligence (AI) require all governments, HEIs and businesses to work together to help graduates and the workforce to become lifelong learners and continuously improve their (digital) skills. All citizens need to be able to work in technology, work with technology and live with technology. Our way of living and working remotely with our colleagues, family and friends since March 2020 has made this priority even more urgent than ever.

Our paper proposed three recommendations for UBC 2021-2027 under this priority:

- Building a stronger lifelong focus to UBC HEIs as key intermediaries between school education and non-formal and informal learning throughout life.
- Develop UBC in the European Education Area context the mobility of learning and qualifications (certification, recognition) throughout life from kindergarten to old age.
- Promoting HEInnovate as an 'ecosystem' tool, where HEIs, social enterprises, policy
 makers, businesses, etc. can use it as a 'neutral' platform on which to develop a dialogue
 about how best to develop their regional/local innovation ecosystem.

(2) Priority 2 (Achieving equality and inclusion): Achieving inclusion and equality in all its senses

A recurring message from the UB Forums has been that HEIs need to become more inclusive. On the one hand, through greater 'opening up', i.e. providing more and better options for access and support to a more diverse student population, in particular adults and students with a migrant background or (learning) disabilities – e.g. by exploring the full potential of digital tools and pedagogies. On the other hand, through greater 'reaching out', i.e. collaborating with local government, businesses and NGOs to help tackle key societal challenges related to migration, discrimination, social inequalities. From the very the beginning of the pandemic, it was predicted that the most vulnerable in society would be the ones most heavily affected by the crisis and would further strengthen already soaring inequalities. The pandemic has made it even more urgent than ever for UBC to contribute to social innovation and inclusion.

Our paper proposed three recommendations for UBC 2021-2027 under this priority:

- Understand how the impact of social innovation can valorised, especially in transborder contexts.
- Highlight and disseminate case studies where social innovation has been sustainably resourced through UBC.
- Explore how social innovation can be scaled up, and where there are trans-national projects that show the potential for success beyond the 'local' levels.

(3) Priority 3 (Green transition): Building sustainable innovation ecosystems

Delivering on the United Nations (UN) Sustainable Development Goals (SDGs) is a top priority for the new Commission and multi-level action. At governmental level, action across a range of different policy areas is needed. The SDGs are therefore embedded in the mission letters of a number of different Commissioners, with the 'Green Deal' as the Commission's flagship initiative. At individual level, all citizens need some level of entrepreneurial, social and civic skills in order to develop the environmental awareness and local community initiatives needed in order to protect our planet. At institutional and system level, stronger cooperation is needed. Stronger, however, does not just mean 'more competitive and productive', but also 'resilient against future disruptions, uncertainties and shocks'. In our paper

from February 2020 we mentioned climate change and the emergence of new digital technologies as potential causes of such future shocks, but instead it was a pandemic which – within the space of a couple of weeks – completely disrupted our systems, institutions and individual way of living Building sustainable and resilient innovation ecosystems is therefore more important than ever today.

Our paper proposed three recommendations for UBC 2021-2027 under this priority:

- Structuring and sharing good examples of funding and organisational behaviours in which all actors are aligned and work together to build resilient innovation ecosystems.
- Showing how all stakeholders can collaborate across regions, borders, local communities, civil society, industry, HEIs and schools. Build synergies with European school actors who are active in innovation and entrepreneurship.
- **Develop further the focus on SMEs**, which are key for strong regional innovation ecosystems and are also mentioned in President von der Leyen's second priority on 'An Economy that works for people': "strengthening the backbone of our economy: our small and medium-sized enterprises SMEs). They represent 99% of all businesses and account for 85% of new jobs created in the last five years. They are our innovators and entrepreneurs".

3. What should be the priorities for UBC in a post-COVID-19 context?

Given the global disruptions as a result of the ongoing COVID-19 pandemic, which are likely to continue and become stronger even in the years to come, we are now consulting <u>you</u> to explore how the priorities and recommendations mentioned above resonate after Europe's experiences with COVID-19. What further priorities and/or recommendations should be added to help us focus our initiatives to the current challenges of businesses, the HE sector and society more broadly?

The pandemic has clearly provided us with some significant lessons:

- First, the health and economic well-being of countries is highly interconnected across the world. We were badly prepared to react strategically to the pandemic either in foresight (modelling and forecasting health challenges, building resilience in supply chains) or in mitigation (developing a vaccine has been a fragmented activity across many often competing countries, and local, national and global mobility has been badly affected). This underlines the need for collaboration, sharing, and openness in addressing global challenges all key principles that underpin the UBC activities.
- Second, the pandemic has had dramatically different impacts geographically, Cities, which have been the mainstay of the economy with high densities of people and organisations/businesses (the interconnectivity of information and ideas) are now seen also as 'coronavirus petri dishes' where close proximity of other humans is a health risk. What we have been developing as 'Smart Cities' are not necessarily 'Resilient Cities', and significant innovation (e.g. AI) will be needed to re-purpose the business and social environments in urban areas to make them resilient. Research and business communities will need to support new forms of policies and practices to build resilience and build resilient learning ecosystems to find new ways for students to experience 'placements' that do not always require being physically based with a business.
- Third, there is not just a role for higher education in building resilient innovation ecosystems.

-

³ Ibid.

During the early stages of the pandemic, there were major shortages of PPE (Personal Protective Equipment). A lack of stockpiling of PPE and extended global supply chains (that were disrupted by lockdowns) threatened many health systems. Local innovation ecosystems emerged to find new ways of working together to overcome the shortage — universities repurposed laboratory equipment, schools that have 3D printers started to manufacture masks, and Formula 1 teams used their state-of-the-art technologies to manufacture new types of ventilators (and the openness of standards helped the teams to design equipment that met the requirements of health systems). This **interlinkage of social and economic dimension across multiple actors in local and regional areas needs to be harnessed** for the future in building social value along with economic value.

- Fourth, the clear evidence of (often previously un-tapped) massive innovative capacity in local and regional areas often regarded university students as 'learners', and not as (in the case of 3D printing) creative producers. Universities' 'business and innovation' activities still occur too much outside of the core curriculum. The Commission (and OECD) emphasise that building creative skills in learners is highly relevant, as are the moves to enable transparency and mobility of creativity learning outcomes through better recognition and using microcredits. UBC needs to understand that U is not just university, but 'universal', where universities can provide strong leadership.
- Fifth, the higher education sector (itself badly affected by the pandemic) must not just look inwards in some form of 'survival' instinct. The sector must realise that the core HE supply chain is potentially compromised by the devastating loss of learning that has taken place in the school sector. It is in the interest of the HE sector to work with schools to maximise the innovative and creative skills of the young people, some of who will become university students, and others who can help in building resilient innovations ecosystem(s). This could include developing remote (virtual) laboratories, harnessing AI and virtual reality developments to build engaging curriculum resources.
- Sixth, to take full advantage of the social and economic value that has been evident during the lockdowns, there needs to be a reconceptualisation of what a university degree 'means'. In most universities, degrees are awarded on the basis of historical disciplinary 'silos' economics, engineering, sociology, theology etc. Degree transcripts (even those using the Europass Diploma Supplement) mostly relegate the soft and transversal experiences of students to 'additional information'. If creativity and innovative skills are so important, then they need to be clearly recognised in qualifications such as degrees. In similar vein, if up- and reskilling in a lifelong learning perspective are so important, then universities should put a greater focus on developing micro-degrees and awarding micro-credentials, especially for adult learners who often have to combine work with many private and family commitments.

1 Introduction

This reflection paper was written in February 2020 at a time of transition from one Commission to another, and it seeks to make **concrete recommendations about EU support for University-Business Cooperation (UBC) for 2021 and beyond**. It draws some key lessons from the policy messages and innovative examples of UBC from the UB Forums over recent years.

The paper is divided in three sections, following three sets of challenges identified in Commission President von der Leyen's political guidelines, which are considered in this first section:

- (1) In section 2, we consider UBC in the context of the challenges and opportunities presented by AI and automation. It focuses in particular on how these technological disruptions have increased the urgency for higher education and businesses to collaborate to address society's need for lifelong learning in a digital world.
- (2) In section 3, we will make the case for increased UBC to support social inclusion and social innovation. In particular, this section will look at how UBC can contribute to making HE more inclusive and how it can help to tackle key societal challenges related to migration, discrimination, social inequalities etc. by reaching out to civil society more widely, to achieve inclusion and equality in all its senses.
- (3) In section 4, we will look at how innovative and entrepreneurial UBC can contribute to sustainable development in line with the UN Sustainable Development Goals (SDGs). We will in particular look at **building sustainable innovation ecosystems**, underpinned by strong entrepreneurship, sustainable financing and collaboration models, as well as Smart Specialisation (S3) strategies with a long-term vision on sustainability.

1.1 Building competitive innovation ecosystems across Europe

For more than 10 years now, the European Commission has been supporting **European University-Business Forums**, with major forums taking place in Brussels every two years, and a regular programme of **thematic UB Forums** taking place in the Member States.⁴ This European platform for University-Business Cooperation (UBC) has been key in bringing together higher education institutions (HEIs), companies, business associations, civil society actors and policymakers at urban, rural, regional, national and international level to network as well as exchange knowledge, ideas and good practices in the field of UBC.

A UBC innovation for knowledge sharing has been facilitated through the Erasmus+ Knowledge Alliances, which "are transnational projects which bring higher education institutions and business together to work on common issues".⁵ An associated development for higher education institutions (HEIs) has been the HEInnovate tool,⁶ which has now been used by more than 1,200 HEIs all over the

⁴ Since 2008, eight European UB Forums (the last European UB Forum was in October 2019) and 23 thematic UB Forums have taken place (the most recent event took place in Lisbon (Portugal) in February 2019).

⁵ See https://ec.europa.eu/programmes/erasmus-plus/opportunities/knowledge-alliances_en

⁶ See https://heinnovate.eu/en

world to explore – in a non-judgmental way – their entrepreneurial capacity, enabling them to identify where they should invest to increase that capacity.

Over recent years, a key focus of the UBC process has been to help improve the innovative and entrepreneurial capacity of innovation ecosystems at all geographical levels, but with a strong focus on cross-border collaboration. For the actors involved in these systems, this has often involved navigating a difficult balance between maintaining competitive advantage and being cooperative to tackle the world's most pressing challenges.

On the one hand, HEIs need to find ways to build cooperative structures to support businesses, local government and – in light of increased social challenges – civil society at large to tackle the challenges our world is facing. For example, the research innovation HEIs can bring to small and medium-sized enterprises (SMEs) provides SMEs with the research capacity they cannot afford individually. On the other hand, HEIs themselves are competitive among each other in research, and have their own research exploitation and business models. To maintain competitive advantage in a higher education environment which has become increasingly focused on global rankings and attractiveness to students, and in which more and more private suppliers have started competing with public educational provision, HEIs need to work with businesses, government and civil society to support their development of the most effective business models.

There are many challenges in achieving a **cohesive innovation ecosystem**, in which different actors work collaboratively (within a competitive context) to successfully balance local, regional and national development activities for the benefit of all with actions to drive local and global competitiveness and innovation. The UB Forums have shown some excellent examples of such collaborative ecosystems, in which HEIs partner with businesses and civil society, focusing on a dominant sector in their region, underpinned by a clear Smart Specialisation Strategy (S3).

In countries, regions, localities and cities with many competing HEIs, diverse business sectors and a range of social and economic challenges, building such ecosystems is even more challenging. This is where the UBC process has been particularly important, for example in helping to bridge the top-down aspects of regional policy and regional economic development, and also supporting the bottom-up process of building new innovative and entrepreneurial linkages between research and innovation in HEIs and the full range of businesses, from SMEs and start-ups to multinationals.

Even if, as has been emphasised repeatedly at the UB Forums to date, intrinsically different cultural approaches towards innovation and research and development (R&D) persist between HEIs and businesses, it is through the UBC process that **the Commission has been successful at 'nudging' both HEIs and businesses to cooperate and to innovate more rapidly and effectively**. It has been an important European platform for networking and establishing collaborative partnerships, sharing knowledge and showcasing new models of cooperation.

1.2 Towards sustainable collaboration in a world of technological and social change

With the transition from the Junker European Commission to the new von der Leyen Commission, and looking ahead at the political priorities for 2021-2027, there is an opportunity **to further motivate HEIs and businesses to collaborate around specific challenges of the new Commission**. In her 'Agenda for Europe',⁷ President von der Leyen is explicit in listing these challenges: *"changes in climate,*

⁷ Von der Leyen, U. (2019). *A Union that Strives for More. My Agenda for Europe.* Political Guidelines for the Next European Commission 2019-2024. Brussels: European Commission. Available at: https://ec.europa.eu/commission/sites/beta-political/files/political-guidelines-next-commission-en.pdf

technology and demography are transforming our societies and way of life [... leaving] a feeling of unease and anxiety in many communities across Europe".8 She then continues by emphasising the importance of collaboration as well as mobilising sustainable and private financing to tackle these:

"Europe must lead the transition to a healthy planet and a new digital world. But it can only do so by bringing people together and upgrading our unique social market economy to fit today's new ambitions [...] we need to tap into private investment by putting green and sustainable financing at the heart of our investment chain and financial system".9

Indeed, technological disruption, changes in demography and climate change are challenges running across the proposals the President von der Leyen's makes, each time with a clear focus on innovation:

- (1) With regards to **technology**, she acknowledges the impact of Artificial Intelligence (AI) where data and AI are the ingredients for innovation that can help us to find solutions to societal" challenges, from health to farming, from security to manufacturing". In addition to this, she says that her priority will be "to get Europe up to speed on digital skills for both young people and adults". This is an essential part of her ambition to "change the culture of education towards lifelong learning that enriches us all".10
- (2) About **demography**, the Agenda states "we need equality for all and equality in all of its senses. [...] Innovation happens when people from different backgrounds and perspectives blend together. With the demographic challenges ahead of us, we cannot afford to leave any potential behind". 11 Reference is made to the European Pillar of Social Rights 12 and the UN's Sustainable Development Agenda¹³ as two key instruments to build 'an economy that works for people'.
- (3) With the **environment**, the *Green Deal* is the most ambitious of all the political priorities. To ensure Europe becomes "the first climate-neutral continent", the Agenda includes an array of proposals, ranging from a Biodiversity Strategy for 2030, a new Circular Economy Action Plan and a new Farm to Fork Strategy on sustainable food, to a strategy on green financing, a European Climate Pact and a Sustainable Europe Investment Plan, which "will support over 1€ trillion of investment over the next decade". With reference to the European Climate Pact, the guidelines underline the importance of collaboration to achieve systemic change "bringing together regions, local communities, civil society, industry and schools. Together they will design and commit to a set of pledges to bring about a change in behaviour, from the individual to the largest multinational".14

This selection from the new Commission President's political guidelines provides a clear pointer to the next set of activities for the UB Forums for 2020 and beyond, putting them in a wider context of UBC in building globally competitive and sustainable innovation ecosystems. A regional innovation ecosystem is not just something that can be 'smart', 'specialised' or 'competitive'. It is part of a European (and indeed global) cluster of innovation ecosystems that must be 'sustainable internally' (delivering social inclusion, well-being and equity for citizens) and 'sustainable externally' (there is little to be gained in a city being competitive and economically successful if sea-level rise will inundate it).

⁸ Ibid.

⁹ Ibid.

¹⁰ Ibid.

¹¹ Ibid.

See https://ec.europa.eu/commission/priorities/deeper-and-fairer-economic-and-monetary-union/europeanpillar-social-rights_en

¹³ See https://sustainabledevelopment.un.org/?menu=1300

¹⁴ Von der Leyen, U. (2019). A Union that Strives for More. My Agenda for Europe. Political Guidelines for the Next 2019-2024. Brussels: European Available Commission Commission. https://ec.europa.eu/commission/sites/beta-political/files/political-guidelines-next-commission_en.pdf

In addition to collaborating with businesses, civil society and policymakers, HEIs also need to collaborate more with schools and vocational education and training institutions. The higher education sector is uniquely structured to be a bridge between all levels of learning, and the other actors involved in the sustainability goals.

2 Lifelong Learning in a Digital World

2.1 Introduction

At the most recent European UB Forum in Brussels (October 2019),¹⁵ we heard that the disruptive and at the same time innovative potential of **Al and automation are a major concern for governments and citizens** across the globe.

It was already estimated in 2016 that, by 2019, around 2.6 million industrial robots would be installed worldwide (a 1.4 million increase compared with 2016). Furthermore, an important study by McKinsey (2017) shows that around 50% of jobs globally could be automated, and that 6 out of 10 occupations today have activities of which more than 30% could be automated. This will not exclusively affect manual labour, as was the case in most previous technological revolutions, but many 'white collar jobs' which have any form of routine are at risk of being automated as well.

The Forum also highlighted the importance of maintaining human agency and oversight in AI processes. To do so, people need the right skillsets to understand and be able to work with AI. To make sure no one is left behind, and everyone can reap the benefits offered by the technological advances of today, **governments need to invest more in developing people's digital skills**. Eurostat data show, for example, that in 2017 only 57% of people in the EU had basic or above basic digital skills, with Denmark (71%), the Netherlands (79%) and Luxembourg (85%) on one end of the spectrum, and Romania (29%) and Bulgaria (29%) on the other end.¹⁸

Al and digital skills, within a wider context of promoting a culture of lifelong learning in Europe, is part of the new Commission's key political priorities under the third headline ambition for Europe – 'A Europe Fit for the Digital Age':

- With regards to **digital technologies and AI**, the new President of the Commission states that "[they] are transforming the world at an unprecedented speed. They have changed how we communicate, live and work. They have changed our societies and our economies. [...] In my first 100 days in office, I will put forward legislation for a coordinated European approach on the human and ethical implications of Artificial Intelligence. This should also look at how we can use big data for innovations that create wealth for our societies and our businesses". 19
- She then continues by underlining the importance of **empowering people through education** and skills, in particular through investing in digital skills: a "priority will be to get Europe up to speed on digital skills for both young people and adults by updating the digital Education Action

¹⁵ See https://ec.europa.eu/education/events/8th-university-business-forum_en

¹⁶ IFR. 2016. *World Robotics Report 2016: European Union occupies top position in the global automation race.* International Federation of Robotics. Published September 29. Available: https://ifr.org/ifr-press-releases/news/world-robotics-report-2016. [Accessed June 4 2019].

¹⁷ MANYIKA, J., LUND, S., CHUI, M., et al. 2017. *Jobs lost, jobs gained: What the future of work will mean for jobs, skills, and wages* McKinsey & Company. Published November. Available: https://www.mckinsey.com/featured-insights/future-of-work/jobs-lost-jobs-gained-what-the-future-of-work-will-mean-for-jobs-skills-and-wages#part4. [Accessed June 3 2019].

¹⁸ The Eurostat 'Digital Skills Indicator' is based on the Digital Competence Framework (developed by DG EAC and the JRC). https://ec.europa.eu/jrc/en/digcomp/digital-competence-framework and https://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=isoc_sk_dskl_i&lang=en

¹⁹ Von der Leyen, U. (2019). *A Union that Strives for More. My Agenda for Europe*. Political Guidelines for the Next European Commission 2019-2024. Brussels: European Commission. Available at: https://ec.europa.eu/commission/sites/beta-political/files/political-guidelines-next-commission-en.pdf

Plan. [...] Digital literacy has to be a foundation for everyone".20

• These priorities are placed within the wider ambition of making the European Education Area a reality by 2025. In such an education area, learners should be able to "move more easily between education systems in different countries [... with a] culture of education towards lifelong learning that enriches us all".²¹ Furthermore, in her Mission Letter to Nicolas Schmit, the new Commissioner for Jobs and Social Rights, President von der Leyen asks him to "lead the work on implementing and updating our skills agenda, focusing on identifying and filling skills shortages and supporting reskilling as part of the just transition".²²

2.2 Supporting lifelong learning for graduates and the workforce

The need for increased UBC to support the development of a lifelong learning culture and tackle skills gaps, especially entrepreneurial and digital skills, in Europe is has been an important recurring message during the UB Forums of the past couple of years. This is not only about providing graduates, throughout their degree, with work-based learning (WBL) opportunities to gain relevant skills and understand why and how to combine WBL with classroom-based learning, but also about offering the active labour force and wider society with opportunities to up- and reskill.

With regards to **preparing graduates as lifelong learners**, education has to equip graduates with the necessary skills to become autonomous learners who will up- and reskill independently when needed. This includes a combination of both more technical 'employability skills' and softer 'life skills' to become both 'good workers' and 'responsible citizens'. This needs to be underpinned by equipping graduates with a wider sense of initiative and entrepreneurial skills to take ownership for their own development.

- To equip graduates with 'work skills', HEIs are increasingly collaborating with regional partners to deliver education focused on providing graduates with skills relevant to labour market needs. Many inspiring examples were presented at recent UB Forums where HEIs and businesses collaborate to provide graduates with project and WBL opportunities to gain relevant skills and experiment with innovative (business) ideas. These types of learning activities, however, require a flexible approach to curriculum design and delivery as well as business management. The extent to which HEIs can develop flexible curricula for regular students varies across Europe, and for SMEs it is often hard to accommodate and adequately support students in workplace settings.
- To equip graduates with 'life skills', increased collaboration between HEIs and businesses across Europe has, each year, provided university students with more opportunities to study or train abroad. Such experiences do not only contribute to developing students' employability skills, but in particular their soft skills. The latest Erasmus+ impact study,²³ for instance, shows that mobility contributes to graduates improving their interpersonal and intercultural skills, as well as their self-confidence. Increasing the quantity and quality of such learning opportunities is part of the Commission's vision to build a European Education Area by 2025. Making this a reality will be one of the key priorities for Mariya Gabriel, the new Commissioner for Innovation, Research, Culture, Education and Youth.²⁴
- UBC is designed not just to provide students with 'work skills' or to sensitise students about

²¹ Ibid.

²⁰ Ibid.

²² Von der Leyen, U. (2019). *Mission Letter to Nicolas Schmit.* Brussels: European Commission. Available at: https://ec.europa.eu/commission/sites/beta-political/files/mission-letter-nicolas-schmit_en.pdf

²³ COMMISSION (2019). *Erasmus+ Higher Education Impact Study*. Brussels: European Commission. Available at: https://op.europa.eu/en/publication-detail/-/publication/94d97f5c-7ae2-11e9-9f05-01aa75ed71a1/language-en ²⁴ Von der Leyen, U. (2019). *Mission Letter to Mariya Gabriel*. Brussels: European Commission. Available at: https://ec.europa.eu/commission/sites/beta-political/files/mission-letter-mariya-gabriel-2019 en.pdf

what businesses do, but also to provide students and staff with 'entrepreneurial skills' and mindsets to be the designers of new innovative products and solutions, and for some of them to establish new businesses. By encouraging and supporting students and staff to shape and set up 'businesses of the future', UBC helps businesses and society become more innovative.

When it comes to offering **relevant additional learning opportunities for the workforce and society**, HEIs are faced with three distinct challenges. The first challenge is to ensure the flexibility of the education system itself, to ensure participation of the workforce. Adults usually have to reconcile studies with work and often also with family obligations – to increase participation in lifelong learning, the Commission already focuses strongly on the recognition of informal and non-formal learning. The second challenge is to ensure that the education provided is indeed relevant both to the labour market and to society. The third challenge relates to adapting teaching methods and activities to the needs of a different student audience, who often already have a lot of experience and expertise.

- Easy access to (further and) higher education is perhaps the greatest barrier underpinning the limited adult participation in lifelong learning. A recurring message from the UB Forums was that more work is needed for HEIs, businesses and governments to collaborate on the validation of prior learning, particularly for adults, to facilitate access back into the education system for up- and reskilling. They also need to work on offering a greater variety of learning modes and learning venues, from Massive Open Online Courses (MOOCs) and blended learning, to entirely classroom-based learning, to accommodate for adults' work and family obligations.
- With regards to the relevance of education, the current speed of change calls for more advanced modes of gathering intelligence about skill needs. The UB Forums of the past few years included many examples of how HEIs are developing curricula based on labour market information provided by employment services or skills surveys with alumni. Closer collaboration with businesses and wider civil society, for example through including business representatives on faculty management boards or through the creation of knowledge hubs, are other examples of how HEIs are successfully working to increase the relevance of their education to the needs of the workforce.
- When it comes to teaching methods and activities, a differentiation of the roles of teachers is needed. A learning model in which teachers and professionals engage in structured collaborative learning needs to be facilitated.¹⁴ Although this is equally true for the teaching of 'traditional and young HE students', it is particularly important for HEIs and teachers to acknowledge that adults with work experience often bring valuable expertise to the learning situation.

In addition to changing the way education is designed, delivered and the way access to the system is granted for the increasingly diverse student body it attracts, HEIs also need to **more actively reach out to the workforce and society**. Collaboration with businesses and civil society here is crucial. HEIs in Europe have always been important 'beacons' of independent research, which has been crucial in providing a healthy sense of criticism on society's construct and for upholding our European values and democracy.²⁵

However, HEIs need to more actively disseminate their innovative research findings and go teach in businesses and civil society organisations to also reach those groups of society who do not actively go out to seek further learning opportunities themselves. This is crucial to foster critical thinking and

11

²⁵ BLESSINGER, P. & DE WIT, H. 2018. *Academic freedom is essential to democracy*. University World News. Published April 6. Available: https://www.universityworldnews.com/post.php?story=20180404101811251. [Accessed June 4 2019].

citizenship skills which, in today's social climate of rising populism, nationalism and distrust in the (European) administration, is more important than ever to protect our European way of life.

In this context, in her Mission Letter to Margaritis Schinas, the new Commissioner and Vice-President for Promoting our European Way of Life, von der Leyen says that "[p]romoting our European way of life requires making sure workers are equipped to thrive in our evolving labour market. A declining workforce and a digital and basic skills gap bring into sharp focus the need to equip people with the tools and knowledge they need".²⁶

2.3 Lifelong learning focused on digital skills

The **digital skills** gap is probably the most urgent one to be addressed collectively by HEIs and businesses. Firstly, the IT and related sectors have created (and will probably continue to create) new jobs. All citizens need digital skills to **be able to** *work in* **technology**. Secondly, although Al may have the potential of automating a lot of jobs, there is at the moment very little political nor public support for entirely eliminating the 'human touch' or agency. All citizens need digital skills to **be able to** *work with* **technology**. Thirdly, media literacy is important to help all citizens distinguish fact from fiction and make responsible and informed choices, which is crucial in protecting our values, democracy and European way of life. All citizens need digital skills to **be able to** *live with* **technology**.

Education has a key role to play in supporting society to develop digital skills. Through its Digital Education Action Plan, which was presented in 2018 and includes a set of 11 concrete actions, the European Commission is already increasing its efforts to support EU Member States to make better use of digital technologies for teaching and learning, develop digital skills and improve education through better data analysis and foresight.²⁷ For HEIs in particular, the Higher Education Hub (Action 4) is meant to support institutions to improve the quality and relevance of teaching and learning, facilitate internationalisation and support better cooperation between HEIs across Europe.²⁸

Recommendations on focus areas for UBC 2021-2027:

- Building a stronger lifelong focus to UBC HEIs as key intermediaries between school education and non-formal and informal learning throughout life.
- UBC in the European Education Area context the mobility of learning and qualifications (certification, recognition) throughout life from kindergarten to old age.
- Promoting HEInnovate as an 'ecosystem' tool, where HEIs, social enterprises, policy
 makers, businessesetc. can use it as a 'neutral' platform on which to develop a dialogue about
 how best to develop their regional/local innovation ecosystem.

²⁶ Von der Leyen, U. (2019). *Mission Letter to Margaritis Schinas*. Brussels: European Commission. Available at: https://ec.europa.eu/commission/sites/beta-political/files/mission-letter-margaritis-schinas-2019 en.pdf

²⁷ COMMISSION. 2018c. *Communication on the Digital Education Action Plan COM(2018) 22 final*. European Commission. Published January 17. Available: https://ec.europa.eu/education/sites/education/files/digital-education-action-plan.pdf. [Accessed January 17 2018].

²⁸ See https://ec.europa.eu/education/education-in-the-eu/european-education-area/digital-education-action-plan-action-4-higher-education-hub_en

3 Equality in All its Senses

3.1 Introduction

A recurring message from the UB Forums has been that **higher education needs to become more inclusive**. HEIs have come under increased pressure to open their gates to a broader student population, and the 'massification' of higher education has led to an increased tertiary attainment rate. The recent Education and Training Monitor (2019) notes that the EU target of 40% participation has been achieved.²⁹ However, too many students still struggle to enter and complete higher education, and there is a link between socio-economic background and higher education participation and outcomes.³⁰

By including civil society in the 'traditional'³¹ triple helix model of collaboration between government, industry and academia, the UB Forums have also underlined the importance of moving towards a **quadruple helix model of collaboration which contributes to social innovation** – i.e. "developing new ideas, services and models to better address social issues".³² For example, HEIs can bring their learning and research capacity to help local communities that are at risk of extremism or economic and social exclusion, and help to develop entrepreneurship, building business capacity in communities that previously had low economic prospects. In other situations, HEIs can provide training capacity, or function as intermediaries that bring together social actors.

The new Commission's commitment to equality and inclusion is a responsibility of Helena Dalli, the new Commissioner for Equality.³³ With regards to improving educational participation, outcomes and social innovation, the new Commission includes the following priorities:

- With regards to **improving access and educational outcomes**, Mariya Gabrial's Mission Letter explicitly states that one of her key tasks will be "improving access to quality education" for all learners. In addition to this, to strengthen Europe's social dimension and support everyone both those in and out of work to find a job and gain the skills they need, Nicolas Schmit's Mission Letter says that "our best instrument to deliver on this is the European Pillar of Social Rights and its 20 principles. I want you to develop an action plan to implement the Pillar". 35
- About social innovation, President von der Leyen believes "it is high time that we reconcile
 the social and the market in today's modern economy". There is a need to move beyond
 innovation in an economic sense alone, and tap into the potential European diversity has to

²⁹ COMMISSION. 2019b. *Education and Training Monitor 2019*. European Commission. Published September 26. Available: https://ec.europa.eu/education/policy/strategic-framework/et-monitor_en. [Accessed September 26 2019].

³⁰ See for example: CRAWFORD, C. (2014). *Socio-economic differences in higher education participation and outcomes.* Working Paper. University of Warwick and Institute for Fiscal Studies. Available at: https://www.ifs.org.uk/uploads/publications/wps/WP201431.pdf

³¹ Collaboration between these three actors still remains a challenge.

³² See https://ec.europa.eu/social/main.jsp?catId=1022&langId=en

³³ Von der Leyen, U. (2019). *Mission Letter to Helena Dalli*. Brussels: European Commission. Available at: https://ec.europa.eu/commission/sites/beta-political/files/mission-letter-helena-dalli_2019_en.pdf

³⁴ Von der Leyen, U. (2019). *Mission Letter to Mariya Gabriel*. Brussels: European Commission. Available at: https://ec.europa.eu/commission/sites/beta-political/files/mission-letter-mariya-gabriel-2019_en.pdf

³⁵ Von der Leyen, U. (2019). *Mission Letter to Nicolas Schmit.* Brussels: European Commission. Available at: https://ec.europa.eu/commission/sites/beta-political/files/mission-letter-nicolas-schmit_en.pdf

offer: "[i]n business, politics and society as a whole, we can only reach our full potential if we use all of our talent and diversity. Diverse teams produce better results. Innovation happens when people from different backgrounds and perspectives blend together. With the demographic challenges ahead of us, we cannot afford to leave any potential behind".36

3.2 Equity and inclusion in higher education

To ensure equal participation and outcomes in higher education, and to meet the objectives of the European Pillar of Social Rights,³⁷ the UB Forums have highlighted the potential of digital technologies for inclusion (building on the range of Communications about the modernisation of education and the potential of technologies for learning) and the importance of embedding inclusion in HEI institutional strategies.

With regards to the **potential of digital tools for inclusive teaching and learning environments**, a 2018 report prepared by the JRC³⁸ states that technology (and AI in particular) has the potential to create more personalised learning environments (PLE). 'Smart content' in the form of digitised and AI-personalised textbooks or digitally customised class assignments in line with students' abilities have the potential to significantly increase motivation and learning gains. The massification of HE has also reduced the capacity of teaching staff to provide individual academic and personal counselling to each student. AI-assisted study guidance of mentoring, an approach which is currently being developed at Georgia Tech in the States, has the potential of providing a solution for this.³⁹

More incentives and support for HEIs to collaborate with the tech industry around digital technologies and inclusion may be a promising avenue for the future. Another important application is data processing, supporting students in research projects to quickly scan large volumes of academic literature, or video processing, which can help teachers to assess students' emotions and engagement in 'real time'.

Beyond exploring the potential digital technologies have to offer, **inclusion needs to be part of HEIs' institutional strategies**. In its renewed agenda for higher education of 2017; the Commission said it would "help HEIs in developing and implementing integrated institutional strategies for inclusion, gender equality and study success".⁴⁰ A recent report published by the EUA reviews a variety of approaches in Europe of how HEIs are making inclusion part of their key strategic priorities.⁴¹ There is a clear UBC opportunity to address one of the overall conclusions of the EUA's review, which is to:

37 See <a href="https://ec.europa.eu/commission/priorities/deeper-and-fairer-economic-and-monetary-union/european-pillar-social-rights/european-pillar-social-rights/european-pillar-social-rights-20-principles en 38 TUOMI, I. 2018. The impact of Artificial Intelligence on learning, teaching, and education Joint Research Centre

en?WT.mc_id=Selectedpublications&WT.ria_c=677&WT.ria_f=888&WT.ria_ev=search. [Accessed November 26 2018].

⁴⁰ COMMISSION (COM(2017) 247 final). Communication on A renewed EU agenda for higher education. Brussels: European Commission. Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52017DC0247&from=EN

³⁶ Von der Leyen, U. (2019). *A Union that Strives for More. My Agenda for Europe*. Political Guidelines for the Next European Commission 2019-2024. Brussels: European Commission. Available at: https://ec.europa.eu/commission/sites/beta-political/files/political-guidelines-next-commission_en.pdf

³⁸ TUOMI, I. 2018. *The impact of Artificial Intelligence on learning, teaching, and education* Joint Research Centre (European Commission). Available: https://publications.europa.eu/en/publication-detail/-/publication/5cb8eee3-e888-11e8-b690-01aa75ed71a1/language-

³⁹ At the last European UB Forum in Brussels, Georgia Tech's model of digital education was put forward as potentially the 'university model of the future'. See Georgia Institute of Technology (2018). *Deliberate Innovation, Lifetime Education*. Georgia Tech. Available at: https://provost.gatech.edu/sites/default/files/documents/deliberate_innovation_lifetime_education.pdf

⁴¹ EUA (2018). *Universities' Strategies towards Diversity*, Equity and Inclusion. Examples from across Europe. Brussels: EUA. Available at: https://eua.eu/downloads/publications/universities-39-strategies-and-approaches-towards-diversity-equity-and-inclusion.pdf

"move the discourse on diversity from a challenge to be solved to **a precondition for quality and excellence**. A number of prominent universities have already explicitly taken this position, as they realise that through ensuring equitable treatment, they improve their learning environment as well as their research. If the university sector as a whole could embrace this notion fully, this would be beneficial to all stakeholders and also for society".⁴²

3.3 UBC for social innovation

The phrase "all stakeholders and also for society" above is a clear signal to HEIs that while they may exist within the global HE research ecosystem (both collaborating and competing with each other), they are spatially grounded in their own local and regional environments. What historically was termed 'town and gown' (a focus on how HEIs would 'get along' with their neighbours) is now much more nuanced, with a focus on how HEIs can be globally, nationally, regionally, and locally embedded. That requires a much deeper relationship with civil society as well as business, and building an understanding of how the widest set of skills, competences, and knowledge can be 'sustainably' enriched through cooperation and collaboration. Social innovation is at the heart of such developments.

In a review for the European Commission 'A European ecosystem for social innovation', ⁴³ Professor Luke Georghiou identified critical enabling factors for social innovation. He first emphasised that **for many HEIs social innovation is already a strategic priority**: "their raison d'être is education focused on precisely the generations most committed to the goals of social innovation, along with the production of knowledge which normally encompasses many of the major objects of social innovation, or at least the underpinning knowledge that is necessary". ⁴⁴ They are often globally networked, bringing new knowledge and knowledge workers into their innovation ecosystem, and they provide an experimental base for businesses and organisations to explore disruptive models of working.

Despite this, Professor Georghiou observes that **HEIs should do more to promote social innovation as a discipline**, by constructing curricula that develop it, and staffing it with excellent researchers and teachers. Social innovation needs to become a criterion for promotion along with research publishing. HEIs, as regional institutions, need to be more effective at building trust, cooperation and dialogue with companies active in social innovation. They need to implement channels that enable a dialogue to be built between citizens, students, university staff and others "to form opinions, give ideas, make contributions and take rational and informed decisions on scientific and technical issues of social importance". ⁴⁵

The challenge for achieving social innovation while respecting university autonomy was evident in the German Rector's Conference resolution of November 2017 on the cooperation of HEIs with industry and society: at present, HEIs are "focusing research too much on projects promising short-term societal or economic benefits. Accordingly, higher education curricula ought to contain programmes calling for civil society engagement as a supplement to teaching students in terms of their subject and methodological skills".⁴⁶

Other key challenges relating to UBC for social innovation include:

⁴² Ibid.

GEORGHIOU, L. 2018. A European ecosystem for social innovation. European Commission. Published April.
 Available: https://publications.europa.eu/en/publication-detail/-/publication/df7a8163-69fd-11e8-9483-01aa75ed71a1/language-en/format-PDF/source-71538714. [Accessed June 12 2018].
 Ibid.

⁴⁵ Ibid.

⁴⁶ GARDNER, M. 2017. *Germany: Universities clarify cooperation with industry, society.* University World News. Published November 18. Available: http://www.universityworldnews.com/article.php?story=20171118070401117. [Accessed November 23 2017].

- **Defining and measuring the impact of social innovation**. To what extent should social innovation be minimalist (i.e. develop students) or maximalist (i.e. change the system), and how is it different from other social movements? Social innovation clearly has impact, but the social return on investment is a difficult concept to measure.
- Insufficient government R&D funding with a strong focus on social innovation. Financial support for social innovation can inspire change in organisational behaviour and encourage the development of new business models, especially for SMEs who need to communicate their social innovation experience more widely.
- Further explore challenges around skills and social inclusion around which universities, businesses and NGOs can come together to drive social innovation. The social innovation 'Molengeek', 47 which was presented at the latest UB Forum in October 2019 in Brussels, offers an inspiring example of how addressing social and economic challenges can go hand in hand by offering more accessible, flexible and learner-centred education and recognition of skills. In the case of 'Molengeek', young people who drop out of school early are offered ICT courses to fill important skill gaps in the high-technology labour market. There is complementarity between the challenges related to skills faced by companies and the challenges around the up- and reskilling of people with a migrant and/or low socio-economic background for social inclusion. This means there is a real opportunity for universities, businesses and NGOs to further explore how they can come together around skills and social inclusion for innovation.

Recommendations on focus areas for UBC 2021-2027:

- Understand how the impact of social innovation can valorised, especially in trans-border contexts.
- Highlight and disseminate case studies where social innovation has been sustainably resourced through UBC.
- Explore how social innovation can be scaled up, and where there are trans-national projects that show the potential for success beyond the 'local' levels.

-

⁴⁷ See https://molengeek.com/

4 Building Sustainable and Resilient Innovation Ecosystems

4.1 Introduction

The previous sections have considered UBC in the context of lifelong learning and digitalisation, as well as achieving equity and inclusion inside higher education, and social innovation at wider societal level. The focus on the social dimension of cooperation reflects a need for UBC to achieve more sustainable impact, beyond mere direct technological transfer and innovation. At the recent 8th European UB Forum in Brussels (October 2019),⁴⁸ the sustainable dimension of UBC – in particular with regards to protecting the environment – was discussed in the context of **delivering the United Nations (UN) Sustainable Development Goals (SDGs)**. In the missions set for the new European Commissioners, the UN SDGs cut across the different policy areas.

For example:

- For Virginijus Sinkevicius, Commissioner for Environment, Oceans and Fisheries, there is a responsibility to develop a "*Biodiversity Strategy for 2030*, looking at everything from Natura2000, deforestation, land degradation, protected species and habitats, and sustainable seas and oceans";⁴⁹
- Kadri Simon, the Commissioner for Energy, "should ensure Europe follows the energy-efficiency-first principle across the board. As part of this, you should look at how Europe can further improve the energy performance of buildings and speed up renovation rates";⁵⁰
- Rovana Plumb, Commissioner for Transport, "should put forward a comprehensive strategy for sustainable and smart mobility";⁵¹
- Mariya Gabriel, Commissioner for Innovation, Research, Culture, Education and Youth, should "ensure sufficient investment flows to disruptive research and breakthrough innovations" and "promote excellence and networking among European universities";⁵² and
- Valdis Dombrovskis, Executive Vice-President for An Economy that Works for People, "will coordinate the work on the **Sustainable Europe Investment Plan**, which should unlock €1 trillion of climate-related investment over the next decade".⁵³

To deliver on the UN Sustainable Development agenda, changes at both individual and institutional level are needed. And UBC has a key role to play in this.

⁻

⁴⁸ See https://ec.europa.eu/education/events/8th-university-business-forum_en

⁴⁹ Von der Leyen, U. (2019). *Mission Letter to Virginijus Sinkevicius*. Brussels: European Commission. Available at: https://ec.europa.eu/commission/commissioner-sinkevicius-commissioner-sinkevicius-commissioner-sinkevicius-commission-letter-sinkevicius-commissioner-sinkevicius-commissioner-sinkevicius-commissioner-sinkevicius-commissioner-sinkevicius-commissioner-sinkevicius-commissioner-sinkevicius-commissioner-sinkevicius-commissioner-sinkevicius-commissioner-sinkevicius-commission-letter-sinkevicius-commission-letter-sinkevicius-commission-commissioner-sinkevicius-commission-letter-sinkevicius-commission-commissio

⁵⁰ Von der Leyen, U. (2019). *Mission Letter to Kadri Simson*. Brussels: European Commission. Available at: https://ec.europa.eu/commission/sites/beta-political/files/mission-letter-kadri-simson_en.pdf

⁵¹ Von der Leyen, U. (2019). *Mission Letter to Kadri Simson*. Brussels: European Commission. Available at: https://ec.europa.eu/commission/sites/beta-political/files/mission-letter-rovana-plumb-2019_en.pdf

⁵² Von der Leyen, U. (2019). *Mission Letter to Mariya Gabriel*. Brussels: European Commission. Available at: https://ec.europa.eu/commission/sites/beta-political/files/mission-letter-mariya-gabriel-2019_en.pdf

⁵³ Von der Leyen, U. (2019). *Mission Letter to Valdis Dombrovskis*. Brussels: European Commission. Available at: https://ec.europa.eu/commission/sites/beta-political/files/mission-letter-valdis-dombrovskis-2019 en.pdf

4.2 Entrepreneurial, socially responsible and resilient citizens

The recent 8th UB Forum in Brussels,⁵⁴ highlighted some of the ground-level innovation that shows the entrepreneurial flair of young people for whom the UN's SDGs are mission-critical. Examples included innovative use of food waste, new research into larger and sustainable wooden buildings, and innovative and sustainable biodegradable packaging. HEIs and businesses, both through internal changes as well as increased and more targeted cooperation with each other focusing on the SDGs, have a key role to play in ensuring students and society at large are given opportunities and supported to not only learn about, but also actively work around implementing the SDGs.

The European Commission recently emphasised the importance for HEIs to continue building their entrepreneurial engagement with society, "[who] too often are perceived as detached from the rest of society". 55 The wider dissemination of academic research as well as education focused on **developing students' entrepreneurial, social and civic skills** are crucial if we are to foster citizens to take up their responsibility to make the changes our planet, species and current social constellation need in order to survive the disruptions society is facing today. Not only HEIs, but companies also need to reconsider the way they conduct business, and the way in which they engage in collaborative action with HEIs and wider civil society. In that context, being 'entrepreneurial' is not just about building new businesses and developing new business models, but it is also about undertaking those activities in a socially responsible way.

In May 2018, the EU adopted its revised Council Recommendation on key competences for lifelong learning. As one of the eight key competences described, **citizenship competence** is defined as "the ability to act as responsible citizens and to fully participate in civic and social life, based on understanding of social, economic, legal and political concepts and structures, as well as global developments and sustainability".⁵⁶ Reference is made explicitly to the UN Sustainable Development Agenda 2030,⁵⁷ saying that EU Member States should "mainstream the ambitions of the UN Sustainable Development Goals (SDG), in particular within the SDG4.7, into education, training and learning, including by fostering the acquisition of knowledge about limiting the multifaceted nature of climate change and using natural resources in a sustainable way".⁵⁸

4.3 Sustainable and resilient innovation ecosystems

In addition to changing the mind-sets and actions of individual citizens, institutions themselves need to change their way of operating and collaborating to focus more actively on the SDGs. Recent UB Forums across Europe, from San Sebastian to Lisbon, from Croatia to Vienna, and from Sofia to Bucharest, have brought together diverse stakeholders involved in trans-European collaboration to build stronger innovation ecosystems.

Stronger does not just mean more competitive and productive, but also 'resilient' against the future disruptions, uncertainties and shocks that may arise through climate change and the impact of new technologies. There will be innovations which "change social practices – the way we live, work and

⁵⁸ İbid.

⁵⁴ See https://ec.europa.eu/education/events/8th-university-business-forum_en

COUNCIL. 2017. Council Conclusions on a renewed EU agenda for higher education - Council Conclusions (20 November 2017).
 Council of The European Union. Published November 20. Available: http://data.consilium.europa.eu/doc/document/ST-14207-2017-INIT/en/pdf. [Accessed December 12 2017].
 COUNCIL. 2018. Council Recommendation of 22 May 2018 on key competences for lifelong learning. Council

of The European Union. Published May 22. Available: https://europa.eu/!fB67yH. [Accessed June 3 2018].
⁵⁷ UN. 2015. *Transforming our World: The 2030 Agenda for Sustainable Development*. United Nations. Published

https://sustainabledevelopment.un.org/content/documents/21252030%20Agenda%20for%20Sustainable%20Development%20web.pdf. [Accessed January 6 2016].

learn".⁵⁹ They make it challenging to predict how our lives will change, and require collective action from all citizens and actors across the education, research and business sectors:⁶⁰

- With regards to higher education, the Times Higher Education in 2019 released a new University Impact Ranking, attempting to document evidence of HEIs' impact on society, rather than just research and teaching performance.⁶¹ This first edition of the ranking includes more than 450 HEIs from 76 countries globally, and assesses HEIs on metrics that are based on 11 of the 17 UN SDGs. By identifying societal impact as a new indicator of excellence, the ranking aims to not only raise awareness on the changing role of HEIs, but to also impact on teaching and learning practices and increase HEIs' accountability. The number of graduate programmes on the SDGs offered by HEIs has also grown in recent years as mentioned before, achieving the UN's SDGs is mission-critical for many young people. There seems to be a clear demand from students to develop more of such programmes. For example, in Sweden, the Lund University PhD programme on Agenda 2030 received 1,183 applicants from 106 countries for only 12 available PhD positions, starting in 2020.⁶²
- In the field of research, evidence shows the UN's sustainability agenda is penetrating academic research in the EU. A report of April 2019 analysing global research on the UN SDGs shows that European nations dominate SDG research, followed by North America and the Asia & Pacific region. The report cites geography, culture and EU funding schemes (such as Horizon 2020) as important facilitators for the increased amount of research on the SDGs compared with other regions in the world.⁶³
- For businesses, a PwC study (2015) shows that 90% of citizens surveyed indicated it was important for businesses to engage with the SDGs. 71% of businesses surveyed said they already knew how they would engage with the SDGs, but only 41% said they would implement the SDGs into their company strategy and in the way they conduct business within the next five years, and only 13% indicated they had the tools to assess their impact against the SDGs.⁶⁴ The UN's Global Compact⁶⁵ provides a set of ten fundamental principles in the area of human rights, labour, environment and anti-corruption which businesses can follow to implement the SDGs.⁶⁶ Companies are furthermore incentivised to report on their progress through submitting annual Communications on Progress (COP).⁶⁷

19

-

⁵⁹ CHESBROUGH, H. 2003. *Open Innovation: The New Imperative for Creating and Profiting from Technology.* Boston, Massachusetts: Harvard Business School Press. Available at: https://www.nmit.edu.my/wp-content/uploads/2017/10/Open-Innovation-the-New-Imperative-for-Creating-and-Profiting-from-Technology.pdf [Accessed October 17 2019].

⁶⁰ The League of European Research Universities (LERU) emphasises "universities, profit and non-profit organisations, individuals involved in coaching and/or teaching, policy makers and governments". https://www.leru.org/files/AP25-StudentEntrepreneur_final.pdf
⁶¹ See

https://www.timeshighereducation.com/rankings/impact/2019/overall#!/page/0/length/25/sort_by/rank/sort_order/asc/cols/undefined

⁶² See https://www.universityworldnews.com/post.php?story=20200123101649218

⁶³ MASAFUMI, N., D. PENDLEBURY, J. SCHNELL and M. SZOMSZOR 2019. *Navigating the Structure of Research on Sustainable Development Goals*. Web of Science Group. Available at: https://clarivate.com/webofsciencegroup/campaigns/sustainable-development-goals/

⁶⁴ PWC. 2015. Make it your business: Engaging with the Sustainable Development Goals. PricewaterhouseCoopers. Available at:

https://www.pwc.com/gx/en/sustainability/SDG/SDG%20Research_FINAL.pdf. [Accessed June 4 2018].

⁶⁵ See https://www.unglobalcompact.org/what-is-gc/mission/principles

⁶⁶ See https://www.unglobalcompact.org/what-is-gc/mission/principles

⁶⁷ See https://www.unglobalcompact.org/participation/report

UBC at the European level is particularly important in helping to build resilience across innovation ecosystems at the many different scales that exist in the EU, where some countries have a smaller population than many European cities (e.g. Estonia 1.25 million, Luxembourg 600,000). UBC needs to support sustainability and resilience at all scales and across borders.

Despite promising developments in the area of sustainable development (for example, countries are starting to adopt national plans and strategies and setting up coordinating structures to implement the SDGs), a lot of work remains to be done. The first Global Sustainable Development Report, prepared by an Independent Group of Scientists appointed by the UN Secretary General (2019), points to four areas of the 2030 Agenda where we have "not {even} been moving in the right direction: rising inequalities, climate change, biodiversity loss and increasing amounts of waste from human activity that are overwhelming capacities to process".⁶⁸

The UN report identifies six 'entry points' and four enabling 'levers' which bear a strong relationship to the UBC activities to date, and which give impetus for UBC to continue to be an energetic European activity in building resilience across society:

"The selected entry points are: Human well-being and capabilities; Sustainable and just economies; Food systems and nutrition patterns; Energy decarbonization with universal access; Urban and peri-urban development; Global environmental commons. Levers are: Governance; Economy and finance; Individual and collective action; Science and technology".⁶⁹

Recommendations on focus areas for UBC 2020-2027:

- Structuring and sharing good examples of funding and organisational behaviours in which all actors are aligned and work together to build resilient innovation ecosystems.
- Showing how all stakeholders can collaborate across regions, local communities, civil society, industry and schools. Build synergies with European school actors who are active in innovation and entrepreneurship.⁷⁰
- Develop further the focus on SMEs, which are also mentioned in President von der Leyen's second priority on 'An Economy that works for people': "strengthening the backbone of our economy: our small and medium-sized enterprises SMEs). They represent 99% of all businesses and account for 85% of new jobs created in the last five years. They are our innovators and entrepreneurs".

For example: European Schoolnet http://www.eun.org/projects/innovation;jsessionid=29264F96248B4C36DE96CD12F8ACA000 and the European School of Entrepreneurship http://ese-project.eu/

⁶⁸ UN. 2019. The Future is now: Science for achieving Sustainable Development. United Nations. Published September. Available: https://sustainabledevelopment.un.org/content/documents/24797GSDR_report_2019.pdf. [Accessed October 1 2019].
⁶⁹ Ibid.

5 Conclusion: From UBC to Societal Education and Business Education

The UBC programme remains a strong contributor to the sharing of knowledge and practice, as well as being an **important platform for networking to support innovation at social and economic level**. It does this with a clear 'European' and 'trans-border' focus, by linking its activities directly to the value system of the European Union, and in promoting the sharing of knowledge. It has done this at a time when liberal capitalism has been (and still is) undergoing a crisis, with concerns about surveillance capitalism, about the levels of financial reward to some business executives, and about concerns relating to the real commitment of businesses to solving the crisis of climate change and global warming.

By taking on the mission of the new European Commission, which – as this reflection paper has tried to show – has a very specific set of policy priorities with a clear social dimension, **UBC** has the potential to become Societal Education and Business Cooperation (SEBC). Here, higher education has the potential to be a pivotal link between businesses and entrepreneurship across all the years of compulsory education and learning (schools) and the period of lifelong learning.

To ensure future EU work to support UBC contributes to implementing the new Commission's political priorities, the previous sections presented a number of **recommendations on focus areas for UBC 2021-2027**, centred around three broad sets of priorities identified in the Commissioners' Mission Letters:

- (1) **UBC to support lifelong learning in a digital world**: in particular, exploring the opportunities and threats of automation and AI for education, and how to support lifelong learning for graduates and the workforce, in particular with respect to digital skills and entrepreneurial skills.
- (2) **UBC to support equality in all its senses**: in particular, exploring the potential of scaling up and valorising the impact of social innovation in a context of ageing, migration and the need to protect and further develop our European values of citizenship, diversity and equality.
- (3) **UBC to deliver on the SDGs**: in particular, exploring how to support HEIs and citizens to develop their innovative and entrepreneurial capacity, and to take on a more active role in protecting the environment (food, waste, energy, etc.) and other major global challenges.